

ABSTRACT OF THE DISCLOSURE

A control system that enables optimum lean burn control only by operating one lever beyond a lean limit of a lean burn engine. A link mechanism opens a throttle valve at an angle according to the manipulated variable of a power lever while the throttle valve is located in a range from an idle position to a full throttle position. When the power lever is further operated beyond the full throttle position of the throttle valve, the throttle valve is kept at a full throttle state independent of the position of the power lever and only a positional sensor outputs a signal according to the manipulated variable of the power lever. The degree of leaning of an air-fuel mixture is determined according to the manipulated variable of the power lever.